REMARKS

On September 12, 2003, Examiner Todd and Attorney discussed the present application via telephone. In that discussion the Attorney reviewed with Examiner Todd potential amendments as indicated in the Interview Summary submitted by Attorney on August 28, 2003. However, agreement was not reached. Attorney also pointed out features of the present invention regarding the nature of the "live maps" that distinguish the invention with respect to the Wang reference. This led to the amendments submitted herein.

Support for the amendments is provided in the present application on page 5, as follows:

> Fig. 2 is a generalised software architecture for a client-server environment. On the client machine, a Graphical User Interface (GUI) layer 210 provides the human-machine interface for a user. The GUI layer 210 interfaces with an application layer 220, where the specific computing operation or purpose performed by the client-server system resides. The application layer 220 interfaces with a middleware layer 230 that handles system aspects such as system resource usage, operating system locks, shared memory access, container services, queueing Services, transaction Services, logical unit of work coordination, inter-process communications, user access control services and configuration retrieval services. As shown, application data, packaged into " maps " or " containers " 250, is passed to the middleware layer 230. The middleware layer 230 represents the operating system and communications services. The transport layer 240 of the client machine is in network communication with the server machine. The server machine replicates the layers 240, 230 and 220, providing a replica transport layer 280, replica middleware layer 270, and replica application layer 260, and functions thereof. Paragraph beginning at page 5, line 10.

> The content of a map/container 250 includes the identification of the " service " which the server machine application is to execute, together with the application data which is required by the particular application process. Fig. 3 shows a representative data packet 310 having header information 320 specific to the transport and middleware layers 240 and 230 (Fig. 2). Optionally, there can be similar trailer information 340. The maps/container content 330 comprises the services information and application data. Paragraph beginning at page 5, line 24.

As stated, application data is "packaged into "maps" or "containers" 250 and passed to the middleware layer 230, i.e., from the application layer 220. According to the OSI model, this layer handles issues like resource allocation and problem partitioning. http://foldoc.doc.ic.ac.uk/foldoc/foldoc.cgi?application+layer. It is consistent with this that the content of a map/container includes the identification of the service which the server machine application is to execute, together with the application data which is required by the particular application process, as stated in the present application. Fig. 3 of the present application shows a representative data packet, such as included in the live maps of the present invention. Further

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details of data that is passed is set out in the present application in the various tables on pages 7
through 10.

In contrast, the packets disclosed in the cited Wang reference are TCP/IP packets relating
to network and transport layers, which provide a lower level of information. The network layer,
the third lowest layer in the OSI seven layer model, determines routing of packets of data from
sender to receiver. http://foldoc.doc.ic.ac.uk/foldoc/foldoc.cgi?network+layer. The transport
layer determines how to use the network layer to provide a virtual error-free, point to point
connection so that host A can send messages to host B and they will arrive un-corrupted and in
the correct order, including establishing and dissolving connections between hosts.
http://foldoc.doc.ic.ac.uk/foldoc/foldoc.cgi?transport+layer. It is advantageous that in the present
invention the live maps, which include the application data packets, are formed at the application
layer, i.e., a layer providing a higher level of information, because this allows passing
information useful for performance monitoring that is not known at the network and transport
layers.

To point out this distinction, which leads to the stated advantages, the claims are
amended herein to state that a computing operation performed by the client resides in an
application layer that communicates with a middleware layer on the client, that data for the
chosen application included in the live maps include data formed at the client application layer,
and that the collection of live maps is passed from the client application layer to the client
middleware layer.

Docket JP919990715US1

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Appl. No.: 09/438,645
Filed: November 12, 1999
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REQESTED ACTION

Applicant contends that with the amendments submitted herein the claimed invention is patentably distinct from the cited art, and requests that the claims be allowed and promptly passed to issuance.

Attorney can be contacted at the telephone number below, or Examiner may wish to contact Attorney by e-mail at the address below if necessary to schedule a telephone call.

Respectfully submitted,

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